PTO/SB/21 (02-04)
Approved for use through 07/31/2006. OMB 0651-0031
I Trademark Office; U.S. DEPARTMENT OF COMMERCE

TRANSMITTAL			Application Number	10/636,008 08/07/2003 Ba-Zhong Shen, Ph.D.		
			Filing Date			
FORM (to be used for all correspondence after initial filing)		First Named Inventor				
		Art Unit				
			Examiner Name	n/a		
	Total Number of Pages in This Submission	6	Attorney Docket Number	BP3018	_	

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			ENCLOSURES (Check all that are hel				
ンン	Amendme	smittal Form  (via credit card payment form PTO-2038) ent/Reply fter Final  Preliminary Amendment (3 pages) ffidavits/declaration(s)	ENCLOSURES (Check all that apply)  After Allowance communication to Technology Center (TC)  Appeal Communication to Board of Appeals and Interferences Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)  Petition Petition Convert to a Provisional Application Power of Attorney, Revocation Change of Correspondence Address  Status Letter				
	Extension  Express A  Information  Certified C  Document  Response Incomplete	n of Time Request  Abandonment Request  on Disclosure Statement  Copy of Priority	Terminal Disclaimer  Request for Refund  CD, Number of CD(s)  The following are also being submitted herewith:  1. Petition under 37 C.F.R. §1.78(a)(3) for the acceptance of an unintentionally delayed claim for priority and Preliminary Amendment (3 pages)  2. Return Postcard				
		SIGNA	TURE OF APPLICANT, ATTORNEY, OR AGENT				
		Garlick Harrison & Markison, LLP (USPTO CN 34399) Shayne X. Short, Ph.D. (Reg. No. 45,105)					
Signat	ure	SXSRot					
Date		08/21/2004					
	CERTIFICATE OF TRANSMISSION/MAILING						

sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with

Shayne X. Short, Ph.D. (Reg. No. 45,105)

Signature

Shayne X. Short, Ph.D. (Reg. No. 45,105)

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO/SB/17 (10-03)

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Effective 10/01/2003. Patent fees are subject to annual revision.

Applicant claims small entity status. See 37 CFR 1.27

(\$) 1,330.00 TOTAL AMOUNT OF PAYMENT

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Complete if Known					
Application Number	10/636,008				
Filing Date	08/07/2003				
First Named Inventor	Ba-Zhong Shen, Ph.D.				
Examiner Name	n/a				
Art Unit	2819				
Attorney Docket No.	BP3018				

METHOD OF PAYMENT (check all that apply)	FEE CALCULATION (continued)					
Check Credit card Money Other None	3. ADDITIONAL FEES					
Deposit Account:	Large E					
Denosit		Fee (\$)		Fee (\$)	Fee Description	Fee Paid
Account Number	1051	130	2051	65	Surcharge - late filing fee or oath	
Deposit Account Garlick Harrison & Markison LLP	1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
Name The Director is authorized to: (check all that apply)	1053	130	1053	130	Non-English specification	
Charge fee(s) indicated below Credit any overpayments	1812 2	2,520	1812	2,520	For filing a request for ex parte reexamination	
Charge any additional fee(s) or any underpayment of fee(s)	1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.	1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
FEE CALCULATION	1251	110	2251	55	Extension for reply within first month	
1. BASIC FILING FEE	1252	420	2252	210	Extension for reply within second month	
Large Entity Small Entity	1253	950	2253	475	Extension for reply within third month	
Fee Fee Fee Fee Fee Paid Code (\$) Code (\$)	1254 1	1,480	2254	740	Extension for reply within fourth month	
1001 770 2001 385 Utility filing fee	1255 2	2,010	2255	1,005	Extension for reply within fifth month	
1002 340 2002 170 Design filing fee	1401	330	2401	165	Notice of Appeal	
1003 530 2003 265 Plant filing fee	1402	330	2402	165	Filing a brief in support of an appeal	
1004 770 2004 385 Reissue filing fee	1403	290	2403	145	Request for oral hearing	igsquare
1005 160 2005 80 Provisional filing fee	1451 1	1,510	1451	1,510	Petition to institute a public use proceeding	
SUBTOTAL (1) (\$) 0	1452	110	2452	55	Petition to revive - unavoidable	
	1453 1	1,330	2453	665	Petition to revive - unintentional	
2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE	1501 1	1,330	2501	665	Utility issue fee (or reissue)	
Extra Claims below Fee Paid	1502	480	2502	240	Design issue fee	
Total Claims	1503	640	2503	320	Plant issue fee	
Claims - 3** = X 86 = Multiple Dependent	1460	130	1460	130	Petitions to the Commissioner	
	1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
Large Entity   Small Entity Fee Fee Fee Fee Fee Description	1806	180	1806		Submission of Information Disclosure Stmt	
Code (\$) Code (\$)	8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1202 18 2202 9 Claims in excess of 20	1809	770	2809	385	Filing a submission after final rejection	
1201 86 2201 43 Independent claims in excess of 3					(37 CFR 1.129(a))	<b></b>
1203 290 2203 145 Multiple dependent claim, if not paid	1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1204 86 2204 43 ** Reissue independent claims over original patent	1801	770	2801	385	, , , , , , , , , , , , , , , , , , , ,	
1205 18 2205 9 ** Reissue claims in excess of 20 and over original patent	1802	900	1802	900	Request for expedited examination of a design application	
SUBTOTAL (2) (\$) 0	Other f	ee (sp	ecify) 💆	etition fee fo ection 1,17(l	or Acceptance of an unintentionally delayed claim for priority es set forth in	1330
SUBTUTAL (2) (♣) →  **or number previously paid, if greater; For Reissues, see above	*Reduc	ed by	Basic F	Filing F	ee Paid SUBTOTAL (3) (\$) 1330	

SUBMITTED BY (Complete (if applicable)) Registration No. Name (Print/Type) Shayne X. Short, Ph.D. 45,105 Telephone (512) 825-1145 (Attorney/Agent) 08/21/2004 Signature

> WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

1

PATENT APPLICATION

THE UNITED STATES PATENT AND TRADEMARK OFFICE

Thventor(s): Ba-Zhong Shen, Ph.D.,

Examiner: n/a

Dr. Kelly Brian Cameron, and

Hau Thien Tran

**Application Serial No: 10/636,008** 

Art Group: 2819 **Confirmation No: 1569** 

**Application Filing Date**: 08/07/2003

Patent No: n/a

**Attorney Docket No: BP3018** 

Patent Issue Date: n/a

Title: 16 QAM and 16 APSK TTCM (Turbo Trellis Coded Modulation) with minimum

bandwidth of 3 bit/s/Hz using a rate 2/4 constituent encoder

Date: Saturday, August 21, 2004 (08/21/2004)

Mail Stop Petition Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

# (1) PETITION UNDER 37 C.F.R. §1.78(a)(3) FOR ACCEPTANCE OF UNINTENTIONALLY DELAYED CLAIM FOR PRIORITY UNDER 35 U.S.C. §120 AND (2) PRELIMINARY AMENDMENT

Dear Sir or Madam:

### (1) PETITION UNDER 37 C.F.R. §1.78(a)(3) FOR ACCEPTANCE OF UNINTENTIONALLY DELAYED CLAIM FOR PRIORITY UNDER 35 U.S.C. §120

The Applicant hereby petitions under 37 C.F.R. §1.78(a)(3) for the acceptance of an unintentionally delayed claim for priority under 35 U.S.C. §120 in the abovereferenced application.

The Applicant asserted the priority claims in the above-referenced patent application within the original filing, but the Applicant unintentionally asserted those priority claims in a manner that was not in compliance with 35 U.S.C. §120 and 37 C.F.R. §1.78(a)(2). The Applicant hereby amends those priority claims to bring them into compliance with 35 U.S.C. §120 and 37 C.F.R. §1.78(a)(2).

The Applicant herewith submits a preliminary amendment to amend the originally-submitted priority claim so that it complies with 35 U.S.C. §120 and 37 C.F.R.  $\S1.78(a)(2);$ 

the Applicant herewith submits the surcharge set forth in §1.17(t); and

the Applicant hereby states that the entire delay between the date the claim was due under 37 C.F.R. §1.78(a)(1)(ii) and the date the claim was filed (i.e., brought into compliance in this filing) was unintentional.

The Applicant respectfully requests that the Examiner enter the "CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS" section as amended below.

### (2) PRELIMINARY AMENDMENT

On page 1, starting at line 4,: please amend the "CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS" section as follows:

#### "CROSS REFERENCE TO RELATED PATENTS/PATENT APPLICATIONS

The present U.S. Utility Patent Application claims priority pursuant to 35 U.S.C. § 119(e) to the following U.S. Provisional Patent Applications which are hereby incorporated herein by reference in their entirety and made part of the present U.S. Utility Patent Application for all purposes:

- 1. U.S. Provisional Patent Application Serial No. 60/384,698, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed May 31, 2002 (05/31/2002), pending.
- 2. U.S. Provisional Application Serial No. 60/480,519, "16 QAM and 16 APSK TTCM (Turbo Trellis Coded Modulation) with minimum bandwidth of 3 bit/s/Hz using a rate 2/4 constituent encoder," (Attorney Docket No. BP3018), filed June 20, 2003 (06/20/2003), pending

The present U.S. Utility Patent Application is also a continuation-in-part (CIP) of also claims priority pursuant to 35 U.S.C. § 120 to the following U.S. Utility Patent Application which is hereby incorporated herein by reference in its entirety and made part of the present U.S. Utility Patent Application for all purposes:

1. U.S. Utility Application Serial No. 10/264,486, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed October 4, 2002 (10/04/2002), pending, which claims priority pursuant to 35 U.S.C. § 119(e) to U.S. Provisional Patent Application Serial No. 60/384,698, entitled "Variable code rate and signal constellation turbo trellis coded modulation codec," (Attorney Docket No. BP 2333), filed May 31, 2002 (05/31/2002), pending."

The Examiner is invited to contact the undersigned by telephone or facsimile if the Examiner believes that such a communication would advance the prosecution of the present patent application, or if the Examiner has any additional questions or concerns.

RESPECTFULLY SUBMITTED,

Bv:

Shayne X. Short, Ph.D.

Reg. No. 45,105

Direct Phone: (512) 825-1145 Direct Fax No. (512) 394-0054

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